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Natural and Cultural Assets and Participatory Forest Management in West Africa

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Introduction

Participatory forest management is now an established principle in most donor-supported forestry programs in West Africa. It became institutionalized during the 1980s as part of a movement towards decentralization and devolution of state enterprises management under structural adjustment programs. Most nation states have implemented forest sector administrative reforms that give greater roles to communities in forest management and recognize the importance of building partnerships between communities and forest departments (Brown 1999).

The idea that community participation is central to effective natural resource management has been recognized in a number of international environmental conventions. It was given a prominent place in the 1992 Rio Earth Summit and the 1994 UN Convention to Combat Desertification. It was embraced in 1997 by the United Nations Intergovernmental Panel on Forests Proposals for Action, which called for the establishment of participatory mechanisms to involve all interested parties, including local communities and indigenous people, in policy development and implementation.

Most West African states have initiated decentralization programs, with devolution of natural resource management as an important component. Most national forestry services in the region now recognize the importance of community forestry, collaborative forestry, or joint forest management and have developed a critique of previous practices based on exclusionary top-down approaches.

Nevertheless, participatory forest management is still generally conceptualized within a technocentric, top-down framework. The goal is to get rural communities to participate in the programs of global and national agencies, rather than to create a platform where rural people can make their own inputs into natural resource policy. The main concerns driving participatory forest management are rooted in neoliberal economic philosophy: the need to make forestry management more efficient and to involve communities in lowering the transaction costs of management. Equity concerns have focused largely on promoting a trickle down of minor benefits from the state to communities from the devolution of management functions. They do not get to grips with redressing the past state appropriation of forest resources for the benefit of industry at the expense of rural dwellers. They do not restore rights in forest resources to rural producers.

Community forestry is typically conceptualized within a framework of ecological crisis. The crisis is blamed on inappropriate local or community natural resource management strategies, overpopulation, poverty, and inappropriate agricultural technologies used by peasant farmers. The objective of community participation is to introduce more efficient regulation and to prevent degradation by rural producers by imposing community natural resource management structures in areas where there was open access. Participation empowers community organizations to control the use of natural resources *by the local population*. But this framework examines neither the distortion of forestry policies by industry, nor the sources of alienation of rural people from these policies.

Crisis narratives have long been used as rhetorical devices to justify external interventions to control natural resources (Leach and Mearns 1996). Paradoxically, just as colonialism justified state appropriation through crisis narratives on the incapacity of the peasantry to manage forestry resources, community forestry now justifies the need for participation and community regulation by resorting to the same narratives. In both cases there is little attempt to understand the human imprint on nature, including the positive interactions between rural people and forests, and to build new initiatives based upon this history.

This chapter explores the ways in which concepts of 'community' and 'environmental crisis' are constructed and implemented in contemporary forest policy in West Africa and the implications of these policies for the relationships among people, their production, and the environment. It argues that many West African communities have interacted with the environment in ways that have enhanced the natural resource base. A forestry strategy rooted in a conception of building natural assets – rather than in protecting a threatened and ostensibly pristine nature from human intervention, as characterizes much environmental thinking – can meet the objectives of reducing poverty and protecting the environment. This alternative approach would address the alienation of the rural poor from mainstream environmental policies and would be a step in the direction of harmonizing popular aspirations with forestry policy.

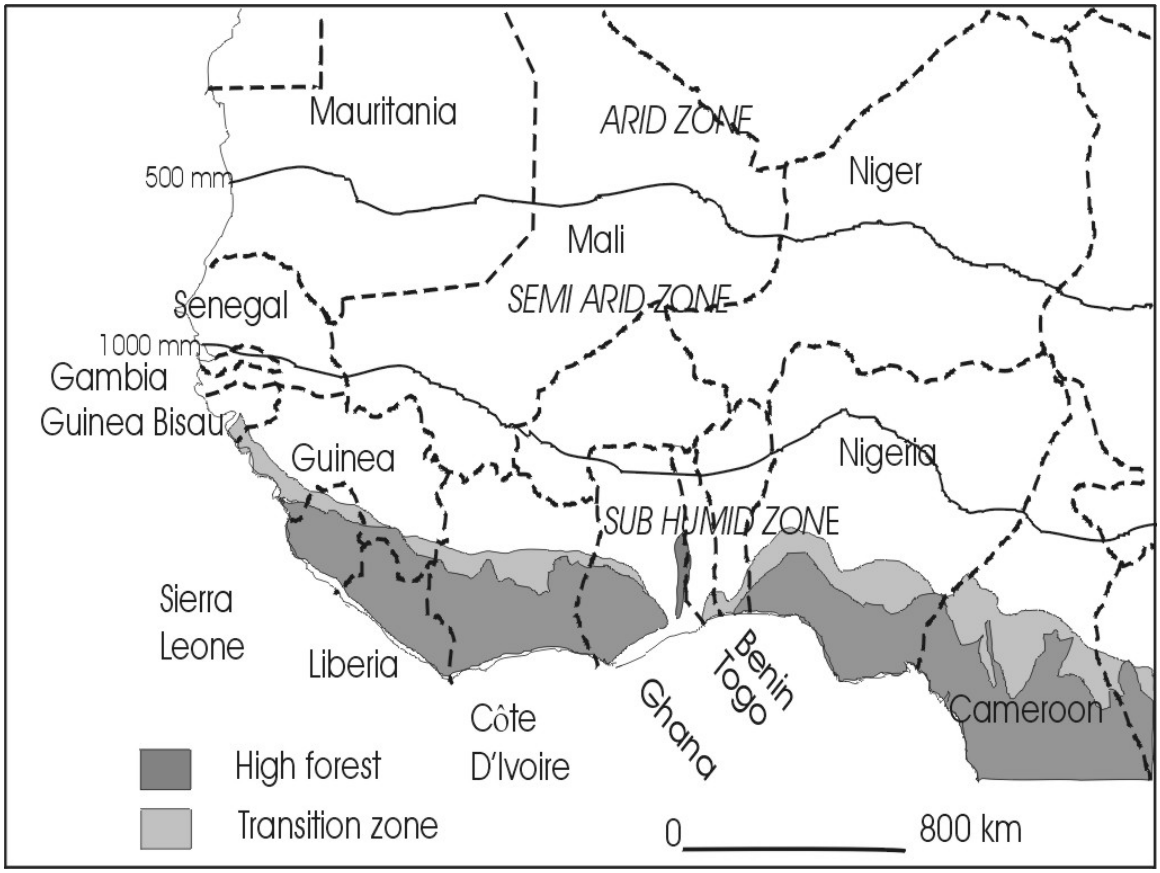
Forests and People in West Africa

The West African region comprises several distinct ecological zones that move from an arid zone in the north, with annual rainfall under 500 mm and a growing season of 75 days, to a semi-arid zone with 500 to 1,000 mm of rainfall, a sub-humid zone with rainfall 1,000 to 1,250 mm, and a southern high-forest zone with rainfall of over 1,250 mm (see Figure 1). The high-forest zone is divided into the eastern and western forests by savanna salients, wedge-like strips of savanna vegetation that reach the coast in the Togo-Dahomey gap. This zone is rich in timber species, and is integrated into high-value timber markets. Access to their timber resources is a highly political issue, and reform of forest management in this zone involves complex governance and political economy issues. In contrast, the Sahelian forest resources further north, dominated by small fire-resistant trees, are often of much lower value. Here the main forest resources are fuelwood and non-timber forest products (NTFPs). Community forestry in the Sahel is largely concerned with lowering the transaction costs of management and increasing efficiency. The savanna forests are major sources of charcoal and fuelwood, which are the dominant fuel sources in urban areas.

Savanna tree species are partially fire-resistant, resulting in slow burning properties that are ideal for fuelwood. Savanna trees often coppice well – that is, they produce plentiful shoots when cut back – enabling forests to sustain high off-takes of fuelwood (Ribot 2001). In some areas, as in the vicinity of Kano, Nigeria, the main fuelwood production occurs on farms, and merchants purchase the wood from farmers. In other areas, as in Ghana and Senegal, fuelwood is harvested mainly on fallow lands by migrant woodcutters and urban merchants (Ribot 2000, 1998). In recent years there has been a transformation in charcoal production in Ghana. In the past, it was produced by migrant charcoal burners on fallow lands over which they gained extractive rights from chiefs. In the present, however, charcoal is mainly produced from the tree resources of

farms, and charcoal burners transact with farmers for suitable trees at the beginning of the farm clearing season (Amanor *et al.* 2002).

Figure 1: Ecological Zones in West Africa



A wide range of NTFPs is also planted, preserved, and exploited in West Africa. Some trees are used for carving canoes, mortars, culinary, and furniture items; some bear fruits that provide important foods and condiments, including *Vitellaria paradoxa* (shea tree), *Parkia biglobosa* (locust bean), *Irvingea gabonensis* (wild mango), *Elaeis guineensis* (oil palm), *Borassus aethiopium* (borassus palm), and *Cola nitida* (cola). Rattans and grasses are used for weaving baskets and furniture. There is a wide range of medicinal plants. Other species provide chewing sticks used for dental cleaning and sponges. In addition to being exploited for local consumption, many NTFPs are sold in urban markets (Falconer 1994).

Forests also provide important ecological services. Trees are often preserved on the banks of streams and rivers and around headwaters to maintain water resources. Forests also provide bushmeat resources.

Within the high-forest zone, the dominant forms of agriculture involve permanent stands of export tree crops, such as cocoa and coffee, and food crops grown in rotational bush fallow or variants of slash-and-burn agriculture. In the savanna, the dominant types of agriculture involve bush plots that are fallowed as well as permanent cultivation of farm plots with the use of manure

to maintain soil fertility. Pastoralism is common in the savanna, and many cattle herders have worked out transhumant strategies in which they move seasonally between dry-season pastures in the south and wet-season pastures in the arid north. In the arid zone, pastoralism dominates since the short growing season makes agriculture a marginal activity. In the semi-arid zone, mixed farming is common, and pastoral populations coexist with sedentary farmers, providing them with livestock, meat, milk, manure and bullock ploughing services in return for staple crops and land for grazing and for minor farming. In the transitional sub-humid zone, cattle herding, a relatively recent activity dating from the nineteenth century, is dependent upon the prior clearing of vegetation by farming populations who have removed *trypanosomiasis* (sleeping sickness) vectors, and on the selection and breeding of *trypanosomiasis-resistent* cattle.

The web of activities of farmers and pastoralists can promote regeneration of environments and biodiversity. Since the early colonial period, however, the activities of both cattle herders and farmers have been maligned by government authorities, who have portrayed them as destroyers of the environment. From the late nineteenth century, European accounts began to manufacture narratives of an impending calamity facing the environment as a result of the inappropriate cultivation techniques of the African. This crisis narrative helped to justify colonial occupation, the appropriation of uncultivated land as State or Crown land, and efforts to regulate and control activities of African producers. In the first work on West African forestry in the English language, for example, Maloney (1887, 236) paints a picture of mindless destruction of forest resources by shifting cultivators, and calls for the protection of nature from 'the wanton mischief of those who take more delight in a good blaze - which they usually originate at night - and in their own ignorance, than in interest in the country. Forests attacked indiscriminately and inconsiderately by axe and fire are on the road to a rapid detimbering'. This deforestation resulted in 'difficulty of securing fire-wood'(Maloney 1887, 233). As evidence, Maloney attributed the savanna salients of the Accra plains and the Togo-Dahomey gap to the activities of shifting cultivation. Yet today, historical evidence suggests that the formation of the Togo-Dahomey gap took place in the late quaternary period, about 3,000-4,000 years ago, and was related to climatic phenomena rather than human interventions (Maley 1993, 1996).

In the mainstream literature, pastoralists are regarded as destroying environments for three reasons. First, the large number of cattle they keep is considered to strain the carrying capacity of the land and promote loss of vegetation cover. Second, their practice of burning grasses early in the dry season to create a new flush of grass is thought to destroy woodland and thickets. Third, since the cattle herders are mobile, they are considered to have no long-term interests in preserving the environment; instead they are seen as exploiting the grazing lands as an open-access resource, thereby promoting the 'tragedy of the commons'. National and international environmental policies are frequently hostile to cattle herders. Attempts to promote individual or community ownership and demarcation of land frequently undermine pastoral livelihood strategies. Moreover, current 'participatory' frameworks tend to delegate land management to village authorities, providing little scope for management over wider areas, which is critical for pastoralism (Lane 1998).

Recent approaches to rangeland management have questioned the assumptions that pastoralists are degraders of the environment. They question the equilibrium approach to rangeland ecology that presupposes the existence of a stage of climax vegetation, instead stressing that arid and

semi-arid regions of Africa are characterized by large fluctuations in species composition, biomass, and cover, largely due to erratic rainfall. The vegetation in this area has adapted to continual disturbance, and in the long-term these rangelands are highly resilient, however dramatic the short-term disturbances. In these environments 'degradation' can be said to occur only when the vegetation crosses a critical threshold that prevents its return to a productive state. It is difficult to differentiate, however, between human-induced 'degradation' and rainfall-induced change (Behnke and Scoones 1993). Pastoralists adapt to these conditions by adjusting their livestock numbers to the current availability of forage. In wet periods, as vegetation cover expands, herds increase; in dry periods, as biomass declines, there is an off-take of large numbers of animals (through sale or death) or a movement to other less affected pastures. This is often more efficient than conservative static stocking strategies based on concepts of carrying capacity (Behnke and Scoones 1993). In this approach, livestock development policies should not be judged by their successes in preventing periodic crashes in livestock numbers – an inevitable product of an erratic environment – but by the appropriateness of responses to these crashes. This requires a flexible approach to environmental management that facilitates mobility of cattle herders rather than rigidly defining pastoral lands and community village lands.

Dominant frameworks for participatory forestry continue to be influenced by paradigms of forest management rooted in notions of discrete spheres between nature and society. Pristine forests are seen to be threatened by impending crisis, as population growth creates pressures on natural resources. These environmental narratives locate the problem of forest loss within local land-use practices, legitimizing external interventions, and deduce rates of forest loss during the twentieth century from presumed homogeneous climax forest belts, seeing forest patches as evidence of deforestation in the surrounding area and assuming that unforested areas were once forest.

Fairhead and Leach (1998) have shown that many areas that were presumed to be pristine forests lost during the twentieth century, were in fact settled farmlands in the nineteenth century and before. Forest areas supported settlements and centralized states, and consisted of a mosaic of patches of forest and fallow in different states of regeneration. Indeed, several recent studies have pointed to the expansion of forest areas in the transition zones of West Africa rather than their decline. These studies indicate that, interactions between the techniques of shifting cultivators and the movement of cattle can create favorable conditions for forest regeneration: cattle grazing helps to eliminate grasses that promote the spread of fires into the forest; manure enriches the soil favoring the regeneration of forest species; and early dry-season burning strategies of cattle herders prevent more intense wildfires in the late dry season. Frequently, these strategies lead to the expansion of woodland and shrubs rather than pasture regeneration, to the chagrin of the herders. In the Adamawa plateau of Cameroon, for example, Fulani herders explain that 'the bush has become dense and enclosed.'(Basset and Boutrais 2000, 248-249).[1]

In a study in the transition zone of Guinea, Fairhead and Leach (1996) show how people in the Kissidougou area have created 'forest islands' around their villages.[2] They argue that human settlement often creates favorable conditions for the regeneration of forests on refuse dumps around the perimeters of settlements. Similarly, based on an analysis of aerial photographs and remote sensing data in the Korhogo area of the transition zone in Cote d'Ivoire, Bassett and Zueli (2000) estimate that woodlands expanded from four percent of the vegetation in 1956 to 31 percent in 1989. Farmers attributed these changes to the influx of Fulani herders, which brought manure and

changes in fire regimes. In many regions forest transgressions into the savanna have been a dominant process in the twentieth century, reflecting a long-term recovery from earlier climatic change and favorable human interactions with the environment along the forest-savanna boundary zone (Maley 2002).

The present mosaic characteristic of many West African forests, where evergreen and deciduous formations are juxtaposed with grasslands, is the product of long-term forest disturbance. The semi-deciduous forests are increasingly perceived as 'scar tissue', a product of a long history of disruption, whose composition has been shaped by fire and human activities (Hawthorne 1996; Van Rompaey 2002). While these are among the most disturbed tropical high-forests, they are also the forests richest in biodiversity and they have the highest concentration of timber species. In Ghana, for example, many of the most important economic species, including *Milicia excelsa* (iroko) and *Kaya* spp. (mahogany) are deliberately preserved by farmers. It is likely that these trees have become common as the result of anthropogenic influences in forest formation. Iroko, one of the major timber species in West Africa, was frequently regarded with near sacred respect in the past and protected. In a survey carried out in the Onitsha and Owerri provinces of Nigeria, Cousins (1946) found that the preponderance of iroko was directly related to human activity in farmland areas, fallow land, and remnant village forests where people had deliberately eliminated unwanted species and preserved those they liked.[3]

While farming is portrayed as a threat to forests in mainstream environmental discourses, this is not reflected in statistics on sources of timber. In the Ghanaian high-forest, 20 percent of the land has been appropriated by the state for forest reserves. Yet during the 1990s more than 80 percent of timber exports originated from off-reserve areas, largely consisting of farmland. In other words, farming areas continued to produce as much timber as the forest reserves, in addition to providing agricultural crops. Although farming areas do not contain closed canopy forest, farmers have managed to preserve forest resources of considerable value in them. This system of farm production of timber in Ghana is increasingly threatened, however, by the extension of concession systems into farming areas, in which trees are appropriated by a small number of timber concessionaires without recognizing the role of farmers in creating these resources. Recent legislation criminalizes the exploitation of timber by farmers or by small-scale chainsaw operators who, unlike logging companies, pay farmers for the timber they exploit on their land. Increasingly alienated from a timber industry that expropriates resources and destroys crops without proper compensation, many farmers are now choosing to destroy timber saplings that regenerate on their farms (Amanor 1996).

In savanna areas, too, farmers have expended considerable energy in fashioning nature and creating valuable forest resources. Again, this is not recognized in mainstream forestry policy, which portrays the savanna areas as threatened by desertification. In the densely settled farming zone around Kano in northern Nigeria, Cline-Cole (2000) documents that forest products, especially fuelwood, accounted for more than one-quarter of the non-agrarian supplementary livelihoods of households. Fuelwood was largely produced for the urban Kano market on farms rather than forest reserves. Large numbers of trees were preserved on farms and some were sown by seeds. Yet official forestry policy did not recognize the skills of farmers in incorporating trees into their farms and in meeting demands for forest products. Regulations were introduced to prevent

farmers felling trees on their land in an attempt to halt deforestation, and to create forest reserves and promote tree plantations (Cline-Cole 1996).

Similarly, in contemporary northern Ghana, farmers are preserving large numbers of trees on their land, particularly of shea *(Vitellaria paradoxa)* because of the growing export demand for shea butter, a high-value seed-oil that has culinary, cosmetic, and medicinal uses. In several areas, the high densities of preserved shea trees resemble plantations, a major achievement since shea is a slow-growing tree that takes up to fifteen years before it begins to fruit. In the park-like environments they have created, Ghanaian farmers also preserve large numbers of locust bean *(Parkia biglobosa* — a condiment with a high protein content), *Acacia albida, Diospyros spp.,* baobab *(Adansonia digitata),* and silk cotton *(Ceiba pentandra)* trees.

Paradoxically, in colonial times the tree cover in farmland was interpreted as evidence of environmental degradation. Colonial foresters assumed that the rich vegetation was not the product of farmers' strategies to incorporate particular trees into their farming system and protect them from fire, but instead represented areas recently opened for cultivation with natural vegetation that farmers had not yet destroyed. Similarly, wilderness areas were thought to be the old farm areas that had been denuded of their cover by slash-and-burn agriculture and abandoned by farmers as their soils became exhausted, whereas in reality these areas were vulnerable to wildfires precisely because they were not being managed by people, and their vegetation was constantly checked by fire. The paucity of vegetation cover was not the product of destructive farming practices, but rather a result of the absence of constructive farming practices. Colonial foresters simply could not conceive that farmers engaged in activities that promoted the regeneration of trees. Rather than build upon the most promising aspects of farmer agroforestry, the colonial Forest Departments sought to appropriate land for the creation of forest reserves and fuelwood plantations, resulting in increasing land pressures (Amanor 2001b).

Today's situation is not much different. Crisis narratives of desertification abound, and Ministries of Agriculture, forestry services and non-governmental organizations (NGOs) promote fast-growing exotic agroforestry species, such as *Cassia siamea* and *Leucaena leucocephala,* that regenerate so profusely that they often become nuisance weeds and do not offer products that are as useful as those of the species preserved by farmers. In many areas, agroforestry activities for women are being promoted, but finding land on which to plant these trees has become a major headache for these women's groups since land around settlements is scarce and there are already optimal trees integrated into the farm environment (Amanor 2001b, 2001c). Indeed, environmental projects are in danger of creating an overload of trees in the farm environment. NGOs can easily get funding for the promotion of these exotic species, whereas the slower growth associated with many of the indigenous species does not fit as readily into donor conceptions of project duration and evaluation. Thus the indigenous species preserved by farmers tend to be undervalued and under-appreciated, and fast-growing international exotics promoted as a panacea to perceived environmental problems.

Forest Management in the Colonial Era

Natural resource management in West Africa has a long history. For instance, between 1820 and 1862 the Inner Delta of the Niger River in Mali came under the Islamic Fulbe theocratic state of the *Dina* of Macina, under the leadership of Sheikh Ahmadu Lobo. The *Dina* codified rules for the use of pastoral, farming, and fishing lands. This recognized the rights of Fulbe cattle herders to exploit the floodplains of the Niger delta during the dry season, and the rights of fisherfolk and farmers during the period when the floodplains were covered with water, thus establishing a regional land-use system attuned to the needs of different production systems (Ba and Daget 1984; Moorehead 1998).

Present-day forestry management, however, has been influenced largely by colonial forest policies. These policies were primarily concerned with securing control over land and natural resources for the colonial authorities. French colonial policy claimed forests as state property. In 1900, the first forest code in Francophone Africa declared state control over all unutilized land, including forests, and established usufructuary rights for rural communities. That is, communities could claim rights to use land, but ultimate ownership was placed under the trusteeship of the colonial authority. The forest code of 1935 placed jurisdiction of forests within the forestry service. Rural communities only had rights to gather non-commercial forest products for domestic use. Commercial rights over forest products were allocated through licenses and production quotas and provided to urban *citoyenfrancais* (Africans who had been assimilated as French citizens) and French expatriates (Ribot 2001a).

Under British colonial rule, two different arrangements prevailed. In some territories, forests were vested in the British Crown, as in southern Nigeria, the Northern Territories of the Gold Coast (Ghana), Sierra Leone, and British Cameroon. In other areas, such as the Gold Coast colony and northern Nigeria, forests were vested in local chiefs. These two different arrangements arose as a result of resistance to colonial policy and the resulting series of alliances with chiefs against more radical forces of resistance, the phenomenon know as Indirect Rule. For instance, attempts to place land under direct control of the colonial authority in the Gold Coast were met with resistance from local merchants, lawyers, and the intelligentsia, who organized the Aborigines' Rights Protection Society (Amanor 1999). The colonial government responded by placing land under the authority of chiefs who were responsible for rural administration. By-laws introduced by chiefs had to be ratified by the colonial authority, and the colonial state could intervene if chiefs deviated from official policy. The creation of forest reserves became the responsibility of paramount chiefs, but legal provisions existed for the Forestry Department to demarcate forest reserves if the chiefs failed to act.

Under both British and French colonial rule, rural administration in Native Authority districts or *cercles,* was based on the authority of the chief. Where chiefs did not exist they were invented, and where they were not sympathetic to colonial policy they were changed. The chief was responsible for implementing colonial policy in the districts. In response to the difficulty colonial authorities experienced in gaining access to wage labor, the power of chiefs was bolstered to enable them to recruit forced labor for public works and the colonial enclaves, and to collect taxes that forced their subjects to seek paid labor or produce export crops. In colonial enclaves, chiefs were responsible for alienating land for expatriate projects, regulating land for export crop production, and in some areas coercing peasants to produce export crops. By the 1940s forced labor was abolished in British and French colonies, and labor markets had become well

established, often based on long-distant migrations. The difficulties in recruiting labor in the early colonial period were now replaced with concerns that there was surplus labor and growing unemployment in urban areas (Lewis 1958; Cowen and Shenton 1996). In rural areas, communal labor for village infrastructure development replaced forced labor on public works programs.

The postwar period saw the emergence of an African bureaucracy in the urban areas that began to assume administrative functions, but customary rule and chiefly authority continued to define rural administration. By the late 1940s concepts of *community development, social development,* and *mass education* were elaborated as official British colonial policy, based on values of self-help and communal labor in undertaking local development projects designed from above (Cowen and Shenton 1996). The chief often became the central figure in such community development.

Mamdani (1996) argues that colonialism produced a bifurcated state that differentiated between a civic sphere, reserved for Europeans and elite citizens, and a customary sphere of Native Authority, or the *indigenat,* reserved for Africans and divided into distinct 'ethnicities.' The civic sphere was the domain of democratic political processes. The customary sphere was one of despotic rule by chiefs appointed or approved by colonial authorities. With the transition to independence the civic sphere became decolonized and Africanized, but in the countryside the autocratic institutions based on conceptions of the 'customary' remained intact in the systems of local government that replaced the native authorities.

This late colonial framework for community development, taken into the post-colonial political setting by the new independent governments, has tended to temper any move towards a more democratic rural administration based on elected councils. Instead the emphasis has been on participation without representation (Ribot 2001a, 2001b). Communities are expected to participate in the implementation of development projects without any voice in their design. Concepts of customary spheres reproduce notions that peasant communities are best represented through traditional institutions, rather than any notion of the aspirations of people for change and a right to determine their future. The state predetermines what constitutes the community and who represents the community. Rather than being discarded as an outmoded institution at the onset of independence, chieftaincy not only has continued to exist in rural administration but also has been strengthened in recent years by notions of participatory community development, particularly in environmental and natural resource management.

The crisis narratives that underpinned colonial forest management in West Africa presented a picture of an environmental catastrophe, in which forests had been rapidly degraded into savanna land and desertification was spreading southwards at an alarming rate. This crisis, attributed to shifting cultivation and other forms of natural resource management that were deemed to be inappropriate, justified the colonial state's appropriation of land and coercive administrative practices.

Recent reforms in state forestry policy that delegate natural resource management to communities are often portrayed as overturning these state-led approaches to forestry. Yet participatory forest management's foundations are rooted in colonial policy.

Participatory Forest Management

The origins of participatory forest management in West Africa can be traced to the late 1970s and early 1980s. It responded to three concerns:

- *The Sahelian droughts of the 1970s* led to the resuscitation of colonial desertification narratives and the associated solutions of large-scale tree planting projects in the savanna areas of West Africa.
- *The energy crisis of the 1970s* sparked fears of a Sahelian fuelwood crisis, and the promotion of fuelwood plantations and energy-saving stoves as technical solutions.
- *The failings of forestry policies* throughout the world, and the alienation of rural people as a consequence of exclusionary forestry policies, led to the development of 'social forestry' as a means of winning over the support of local people (Westoby 1987; Peloso 1992).

Social forestry involved state agencies, in collaboration with NGOs, supporting tree planting projects, providing seedlings to farmers, and undertaking extension activities to encourage more appropriate agriculture in forest fringe communities. An example of these early reforestation projects is the *Bosquets Villageois* (village woodlands) in Mali, a response to the drought of the 1970s. Management plans for reforestation areas were created by the *Service de Eaux et Forests* (Water and Forestry Service), and the villages were responsible for planting species chosen by technical services in community woodlands. Since the rural people could not make any creative inputs into these projects and gained few, if any, benefits from them, they had no incentives to manage these woodlands and the projects failed (Kone 2001).

The second stage of development in participatory forestry management began with the adoption of structural adjustment programs (SAPs) by African states in return for loans and grants. One of the conditionalities attached to aid was the divestiture of centralized state apparatus and the decentralization of administration. Natural resource management played a prominent role in this divestiture, and the World Bank and other international agencies pressed state forest departments to devolve management of forest resources to local administrative bodies, communities, and private-sector enterprises. During the 1990s, many West African states moved to introduce new forest codes, enact new forest policies, and develop national principles of joint forest management with communities, bringing new decentralized natural resource and land administrative systems into being.

The rationale for this interest in participatory forest management is that it can improve administrative efficiency, reduce administrative costs, address equity issues, and improve environmental monitoring (Zhang 2001; Kellert *et al.* 2000; Brown 1999). Behind these interests, however, were other less explicit objectives associated with structural adjustment: rolling back the state, reducing the government budget deficit, placing the burdens of natural resource management on decentralized local authorities and communities, retrenching workers from the forestry service, and increasing corporate control over natural resource management.

Decentralized Fuelwood Management in the Sahel

In the Sahelian countries, a major focus has been on decentralizing fuelwood resource management. Case studies from Mali, Burkina Faso, and Senegal reveal several common features of these reforms.

In Mali, a new Forest Law enacted in 1994 delegates responsibility for forest management to *Collectives Territoriales Decentralisees* (Decentralized Territorial Collectives), which form the basic unit of local government. These units have the right to manage, protect, conserve, and develop forest management plans by decree. Local government is responsible for delegating management of specific forest areas to the *Structure Rurale de Gestions de Bois* (SRGB - Rural Woods Management Structure), which are local associations and cooperatives. In collaboration with the forestry service, the SRGBs develop management plans that then have to be approved by local government. The SRGBs consist of groups interested in fuelwood exploitation, and the forest management plan includes annual exploitation quotas and sustainable production targets. These are negotiated by an ad hoc commission comprised of four representatives, two from the SRGB, one from local government, and one from the forestry service. In the event of conflicts over the fixing and distribution of quotas, the SRGBs can appeal to a regional commission. Once a management plan has been approved, the SRGB receives a permit upon payment of a forest exploitation tax (Ribot 2001b; Intercooperation 2001; Kone 2001).

Similarly, in Burkina Faso the 1997 Forestry Code distinguishes between public forest lands of national interest and those of local interest, and provides for delegation of management of the latter to *Collectives Territoriales Decentralisees* and local communities or private concerns under them. Public lands of national interest remain under the forestry service, and any exploitation of these areas is based on permits it issues. The Forest Code aims to balance the conservation of resources with their use to meet the economic and social needs of local populations. Community forest groups, organized into cooperatives, implement a management plan devised in collaboration with the forestry service. The groups do not control the cutting of fuelwood, however, for which the forestry service issue permits to merchants. The price of fuelwood, fixed by the state, is paid by the merchants to the forestry service, which distributes part of the revenue back to the community group (Ribot 2001b, 2000; Dorlochter-Sulser *et al.* 2000).

In Senegal, the fuelwood industry supplies much larger urban markets than in Mali and Burkina Faso, and it is dominated by a few rich merchants (Ribot 1998). In 1994, the government of Senegal introduced a new forest law that sought to make forestry management more participatory (Barro 1998). The law reaffirms the State's control over forests, but makes provisions for the state to delegate rights to concessionaires or private companies and to local government. As in Burkina Faso and Mali, this enables the state to retain choice forests as national forests. At the same time, however, the law opens the possibility of Rural Council (local government) participation. To participate in forest management the elected Rural Council must request that the forestry service draw up a management plan, specifying the quantity of wood that can be cut from different locations, the methods to be used and the reforestation measures that should be in place to promote sustainable fuelwood production. The Rural Council can delegate the right to exploit designated areas to individuals, cooperatives, and corporations under terms set by the forestry service. They cannot develop their own management plan, nor decide to conserve their forests, nor exploit them for commodities other than fuelwood. If the Rural Council does not accept the management

plan, or does not apply for one, the forestry service can allocate rights of exploitation to outside commercial interests.

Although Senegal's Rural Councils are mainly elected, the candidates are not chosen at the local level. They are presented for election by nationally registered political powers and by deputies in the national assembly, and are selected on the basis of their party affiliation. This results in weak downward accountability. As a result, the demands that rural communities can place on Rural Councils are limited. Moreover, while communities can gain access to forest management for fuelwood production, the distribution of licenses for the transport and sale of fuelwood on markets has not been decentralized to local government. Yet it is in this sector that most of the profits in fuelwood are made. Local producers are obliged to sell at low prices to a small number of licensed merchants (Ribot 2001b, 1995).

In all three Sahelian countries, participation thus is largely viewed as creating local responsibilities in the management of more marginal forests. While communities gain some rights to exploit natural resources, these are often limited to production for domestic use and local markets. The forestry services have options of designating the richest areas as national forests and excluding them from community management. Licensing schemes ensure that the most important commercial resources are maintained for non-local elites, and that forest products cannot be transported beyond custom posts without the necessary permits. This mechanism centralizes control over commercial exploitation of natural resources, so that state agencies can allocate them to select clients or allies. Participation frequently transfers the costs of forest management to local communities without providing them with corresponding benefits.

Decentralized Timber Management in the High-Forest Zone

In contrast with the Sahelian zone, forest management in the high-forest zone involves highly valuable timber resources that are traded on international markets. Hence attempts to reform forest management are opposed by vested interests, such as timber concessionaires who control vast forest areas and gain super-profits from their exploitation. International donor policies have sought to build the capacity of forestry services to manage resources more efficiently, and to create linkages for civil society participation to counter the alliance of industry with powerful politicians (Brown *et al.* 2002). The process of forest-policy reform is complex with different actors – including multilateral donors, bilateral donors, state agencies, and politicians – attempting to impose agendas, protect interests, introduce counter-agendas, and deflect policy processes that are being implemented.

In the early stages of structural adjustment, aid donors backed the timber industry as a way of promoting export-oriented economies. This threatened the long-term sustainability of timber production, and brought to light a series of glaring contradictions between the huge profits made in timber exploitation and the poverty of many forest dwellers who have minimal rights to forest resources. The growing international critique of the negative impact of SAPs on the environment and on poverty encouraged forestry sector reforms. Case studies from Ghana and Cameroon illustrate the rather limited role of recent participatory strategies in West African timber production.

Forestry Reform in Ghana

In Ghana, the timber industry had virtually collapsed during the 1970s and early 1980s under the burden of economic recession. Prior to this, timber had been the country's third largest export behind cocoa and gold. In 1983, Ghana signed a SAP with the International Monetary Fund. The timber sector was identified for special attention in the World Bank's Export Rehabilitation Project, and major donor programs were arranged to rebuild capacity through credit for re-equipping the industry and for transport. In the period 1983-86 the World Bank and UK government provided more than $42 million to private-sector companies in Ghana. The selection process for disbursing loans was coordinated by the Ministry of Land and Natural Resources, subject to the approval of donor agencies. These were largely disbursed as 'soft loans' with a 1.5 percent interest rates repayment over 40 years. Although these resulted in increased export earnings, they also increased national debts and disproportionately benefited a small class of timber concessionaires. As an article in the *Financial Times* commented: 'A seven-fold rise in export earnings to $80 million a year may seem impressive, but not when you have $30 million annual debt repayments on transport alone.'(Keeling 1989)

By 1987, it became evident that malpractices were rampant in the revitalized private forestry sector. An investigation conducted by the government of Ghana led to the prosecution of many firms who were violating concession regulations, felling undersized trees, under-invoicing timber exports, smuggling timber, bribing officials, and illegally repatriating profits outside of Ghana. Many of the timber operations were local fronts for foreign companies, and many of them were fly-by-night companies taking advantage of the favorable loans and the large profits to be made in timber trade.

Deeply embarrassed by an expose published by Friends of the Earth (1992), donors began to re-evaluate their strategies. They recognized that sustainable development could not be promoted by disbursing funds for commercial logging without allocating funds for forest conservation and management. During the early 1990s, they turned their attention to building the capacity of the forestry service. The major foci were building inventory systems for monitoring of forest resources, streamlining systems for allocating timber concessions to promote transparency and better revenue collection, and encouraging community participation in forest management.

As sustainable management plans introduced in forest reserves have limited harvesting, timber concessions on farmlands have expanded. Here the main problems have been large amounts of timber being harvested by industry and small-scale chainsaw operators without licenses or permits and the growing alienation of rural farmers from the forestry sector. Distressed by the increasing amounts of timber harvested from their farms by concessionaires who were under no obligation to compensate them, farmers in many areas deliberately destroyed timber trees and saplings that regenerated on their land as an expression of anger and to prevent concessionaires entering and damaging their farms. A Collaborative Forest Management Unit was established within the forestry service in 1994 in response to these concerns.

In Ghanaian law, timber is today recognized as the property of the chief who exercises authority over the land. Farmers have no rights to sell trees on their land, and receive no rent or royalty

from the exploitation of timber. Instead timber royalties are divided between paramount chiefs, local chiefs, and district councils. These are comparatively recent arrangements, however, and before the development of the concession system farmers had rights to the trees on their land (Amanor 1999, 1997, 1996). For example, farmers sold trees to pitsaw operators in return for one-third of the sawn beams or their equivalent value (Foggie and Piasecki 1962). With the expansion of timber exploitation, concessionaires sought to secure the timber on lands in farming areas. This was achieved through the creation of an invented tradition that timber resources belonged to the chiefs of the domain. This was formally enacted in the Concessions Act of 1962, which vested all trees in Ghana in the President to manage on behalf of the chiefs. Nevertheless, in many areas, small-scale extraction of timber on farmlands by pitsawyers, and by the chainsaw operators who came to replace them, continued until the 1990s. It was only during the past decades, as the main source of timber moved from forest reserves to farmland, that laws preventing farmers from felling trees on their farms have been enforced.

The adoption of participatory forest management in Ghana was largely a response to the problem of regulating farmland timber. The former Conservator of Forests, Johnnie Francois, aptly summed up forestry service concerns:

> *It was quite clear to me that we were having a difficult time coping on the ground, that we needed more support on the 'ground floor'. We did not have enough staff to have eyes all over the place. We needed the support of local people and yet these are the very people who are disillusioned with us...It is only when the forests have a real value to the local people will we be able to gain their cooperation and energy for forest protection and management. Without that cooperation the future of the forests cannot be guaranteed, except at the cost of a vast army of forest guards.*(cited in Boateng 1995)

A series of stakeholder workshops was launched to create a consultative process defining reforms in forestry laws. This resulted in the 1994 Forestry and Wildlife Policy and Interim Measures to Control Illegal Felling in 1995. These measures recognized that the future of the forestry industry depended upon farmers preserving and planting trees. However, this process soon ran into resistance from vested interests, who argued that forest tenure laws could not be reformed since they were enshrined within the national constitution. In the end, the reform process introduced rather vague Social Responsibility Agreements (SRAs) as a compromise, in which concessionaires agreed to provide communities with payments - set at only 5 percent of the stumpage value - for infrastructure projects, in return for the right to exploit the timber resources in their vicinity, including both forest reserves and farm and fallow land. This was an unsatisfactory solution, not only because the benefits of individual efforts were redistributed to the community, but also because the chiefs frequently dominated this process and defined the appropriate forms that SRAs should take.

Paradoxically, while the new forestry policy aimed to establish a framework for participatory management, it created the conditions for the further erosion of farmers' rights by centralizing off-reserve forest management into the hands of the forestry service. Prior to this, decentralized District Assemblies issued permits and licenses for exploitation of forest resources. Now with the concession system consolidated on farm lands, it is difficult for local timber craft producers to get access to trees for production of mortars, canoes, and wood carvings. The informal timber

sector has been criminalized by legislation that bans the use of chainsaws in processing lumber into boards, and the military has launched punitive campaigns against people who continue to produce chainsaw timber. Nevertheless, the main timber supplies on the urban market are still sourced from chainsaw operators, since concessionaires prefer to export their timber. With prices rising on the urban market, chainsaw timber has become the preserve of highly organized illegal operations that have the influence to arrange all the necessary rents to pass through or evade checkpoints.

At the same time, the forestry service's Collaborative Forest Management program seeks to involve local communities in the planning, implementation, and monitoring of forest reserves. The instrument for this is the promotion of Community Forest Committees (CFCs) in communities around the edge of forest reserves, which enter into contractual relations with the forestry service to perform management functions. These include boundary maintenance, firebreak establishment, tree planting within reserves, facilitating and monitoring Social Responsibility Agreements with timber concessionaires, and policing the forest reserves against illegal encroachers. As the forestry service retrenches its own workforce in line with SAPs, forest-edge communities are increasingly being drawn upon to provide such services. The essence of this process is the provision of labor services rather than participation in management planning. While communities may get employment benefits, these are mere crumbs compared to the huge profits being realized by the forest industry.

Ghana's laws on decentralization, which have roots in the radical populism of the early 1980s, embody an alternative framework based on downward accountability to communities who participate in setting development goals and objectives. This legislation provides for democratically elected District Assemblies and sub-district Area Councils. The Area Councils are responsible for drawing up development plans to be discussed and ratified at community meetings. This process is not operational, however, since the various government agencies, including the forestry service, have resisted decentralization. The Ministry of Forestry and Lands (1998) have argued that the high forests cannot be decentralized since they are of national strategic importance and that local authorities do not have the competence to manage them. However the timber poor savanna forests in northern Ghana are considered to be only of ‘local importance’ and the Ministry of Lands And Forests has recommended that they can be transferred to District Assemblies. As a result two different management programs exist for high forest and savanna forest resources, which enables the powerful timber industry to appropriate the rich timber resources of the south with minimal benefits going to rural communities and the farmers who have nurtured timber trees, and for the state to shift the burden of managing savanna forests – which have more of a public good function rather than commercial potential – onto the communities and their representatives.

Forestry Reform in Cameroon

During the 1960s and 1970s, Cameroon was one of the fastest growing economies in Africa with annual growth rates of more than five percent. Growth was largely based on exports of cocoa, coffee, cotton, aluminum, and petroleum. In the 1980s, however, poor management and unfavorable international trade relations led to budgetary crisis, forcing Cameroon to accept a

SAP in 1988. Growing demand for timber in Asia encouraged the expansion of the timber industry, and in the late 1980s and 1990s timber accounted for more than a quarter of the value of exports. The political regime used logging concessions as a way of bolstering its political support, and members of the regime were closely allied with timber contractors. There were no requirements to manage concessions on a sustainable basis (Brunner and Ekoko 2000; Djeumo 2001).

The World Bank targeted forestry sector reform as a criterion for 'good governance' in Cameroon and a condition for disbursement of SAP loans. The major focus is the allocation of concessions by an auction process, with more 'realistic' fees to enable the government to capture the rents from timber exploitation. In 1994 a draft Forest Law was introduced, which was largely drawn up by the World Bank (Brunner and Ekoko 2000). In addition to these changes, it required drawing up of sustainable forest management plans as a condition for exploiting a concession.

The new law also included provisions for local communities to acquire exclusive rights to manage areas of up to 5,000 hectares as community forests, and to gain revenues from logging these forests or contracting them out to logging companies. This was perceived by donors as encouraging local communities to participate in monitoring forest resources in their localities, thus promoting efficiency and transparency. This law did not build upon any strong domestic constituency or organizations for forest reform, however, and hence these provisions faltered both in the definition of what constitutes a 'community' and 'community forestry' and in the provisions of an institutional structure to support community forestry (Egbe 2001).

The draft laws were accepted by the Ministry of Environment and Forests and by the President, but the elected National Assembly sought to modify the legislation. The main concern of the Assembly was that with implementation of an auction system, national timber companies would be unable to compete with international companies for concessions, and the country's forest resources would, in effect, be sold out to foreigners. Many parliamentarians were directly threatened by these reforms since they had economic interests in the forest industry. The National Assembly sought to introduce a ban on log exports as an alternative way to promote sustainable production and value-added processing of logs in the national sector. This export ban threatened the interests of the French timber companies that exported over 50 percent of Cameroonian logs for processing in France. The French government intervened on their behalf, pressuring the government of Cameroon to retract the export log ban (Brunner and Ekoko 2000). The interventions of the French government were akin to those of national level parliamentarians, acting as a patron for narrowly defined economic interests.[4]

The World Bank also opposed the log export ban on the grounds that it promoted inefficient processing of timber and depressed the local price of wood. The Bank's advocacy of increasing area taxes for concessions to encourage higher prices for timber and more efficient processing is based on a conception of the value of tropical timbers as exotic resources for export, rather than as basic requirements within African economies for building, construction, and furniture. Thus the environmental rhetoric threatens to secure tropical woods for luxury export markets, and for the large firms with greatest access to this market, without addressing the need for domestic supplies of timber.

The equity concerns within the 1994 Forest Law are situated within this process of creating a leaner, and more efficient timber industry, and the associated struggles between international and national timber capital. On paper Cameroon has one of the most progressive forest laws in Africa, with the law's provisions for the establishment of community forests. But the commitment of policy makers to equity objectives is questionable. Seven years after the enactment of the law, 104 applications had been received, but only 12 community forests had been allocated (Djeumo 2001). This reflects stringent procedures that act as a barrier to communities of peasant farmers who lack access to information. To obtain a community forest, communities must constitute a legal entity with a minimum of between three to seven members. Four legal entities are recognized – associations, cooperatives, common initiative groups, and economic interest groups – each of which is governed by different laws and requirements, and regulated by different ministries. Frequently, it is the well-connected elites who can mobilize networks of people to pose as a community group (Djeumo 2001; Graziani and Burnham 2001; Brown 1999). Indeed, the initiators of 'community groups' are often non-residential elites who use their social connections, information, and experience to process community forest applications. They frequently act in concert with traditional authorities who are offered prominent positions in the new community entity (Djeumo 2001). Many of these applications are submitted by political leaders, such as mayors and deputies, who have traditions of acting on the behalf of timber companies in whose fortunes they often have a stake (Djeumo 2001).

Timber corporations themselves have sponsored the formation of community forest groups, using them as a front for illegal logging activities, and rapidly logging out the community forest with little if any benefit to the village. The first allocated community forest at Mbimboue has been completely logged out, and members of the community group are in prison (Djeumo 2001). Fear of prosecution for irregular accounting and management practices may discourage some settlements from forming community entities. Community forest entities must compete with industry, since potential community forest areas may also be offered on a permit basis to logging firms. In principle, community forests are given initial preference, but they are given only a period of three months in which to present their technical management plan and financial status, clearly an onerous task for communities of smallholder farmers. Given this context, it is not surprising that Sharpe (1998) finds that among rural dwellers in south-west Cameroon there exists considerable mistrust of recent reforms and participatory projects, which they view as another chapter in the of saga in the exploitation of their forests by external forces, political collaborators, and traditional authorities.

Political Economy of Forest Management Decentralization

Complex political economy issues are involved in forest management and deforestation. In both Sahelian fuelwood economies and high-forest export timber economies state policies have expropriated forest resources for a small class of timber companies and urban charcoal merchants. This expropriation is achieved through the allocation of permits, licenses, concessions for commercial exploitation, and road checks on the movement of forest commodities. The system of concessions and licenses extends even to the forest products of farmlands. There is a profound contradiction in this system: forest resources in West Africa are the product of the actions of rural people on the environment, but the fruits of this relationship

are appropriated by states or chiefs who act in concert with logging companies. The appropriators of the value of forest resources are not usually instrumental in their regeneration. This dramatically alters the relationship between rural people and the natural assets they preserve, jeopardizing the survival of both.

The alienation of rural people from forestry policy has been recognized in the recent framework for decentralization of forestry administration. However, reform efforts have attributed this alienation to the top-down approach of state forestry administrations, rather than to the appropriation of these resources by the state for private industry. Participatory reforms open a role for communities in the management of forest resources, and give them access to the benefit flows that arise from contracting out management services. But such participation does not address the fundamental issues of the control of forest resources and their role in building rural economies. These are initiated by numerous international environmental projects that have built their own coalitions with different ministries, agencies, NGOs, and community groups. Since international environmental programs have larger funding sources than national decentralization programs, and often concentrate on a few localities ('pilot projects'), they often have more impact than national processes of decentralization. This results in a multiple layering of institutional domains for natural resource management and political struggles for control (Metha *et al.* 1999; Benjaminsen and Lund 2001).

In constructing frameworks for participation, environmental projects define what constitutes the community, and who exercises community leadership, in the context of their own specific preoccupations. Once again, this usually means marshalling the support of village chiefs and other local elites to encourage or coerce local people to collaborate. Whereas decentralization has to work with some concept of democracy and downward accountability and some recognition of popular struggles and aspirations, these tend to be absent from such project-based initiatives. Instead the project frequently replicates the colonial diktat of participation without representation. These community organizations not only co-opt the attempts of rural populations to organize independently, but also tend to promote factional and ethnic-territorial based organization, since it is easiest for rural groups to represent themselves as competing with other territorially based groups for scarce resources. The lack of independent rural associations representing the interests of rural people in forest resources makes it difficult for them to organize to voice their own concerns outside the dominant structures of forestry management.

Inventing Communities

While community forestry has a high profile in official development circles, the concept of the autonomous 'community' is problematic in West Africa. Migration has been common throughout the region since the nineteenth century, and the growth of export agriculture often has been dependent upon an influx of migrant labor. Frequently this has involved long-distance migrations, such as the movement of Soninke from northern Mali into the Senegambia for groundnut cultivation (Manchuelle 1997), and migrations from Niger, Burkina Faso, and Mali into the cocoa and coffee belts of Ghana and Cote d'lvoire (Hill 1956; Rouche 1954; Chaveau and Leonard 1996; Leonard 1997).

Even where agriculture has developed without long-distance migrations, the concept of local communities can be fraught with difficulty. Sharpe (1998) observes that in south-west Cameroon, for example, present-day forest settlements typically are not survivals from a historical past but rather modern social formations that have resulted when a heterogeneous people from a variety of ethnic backgrounds have coalesced for the task of converting forest into agricultural land. This results in complex crosscutting ties between settlements and patron-client networks linking rural and urban worlds, phenomena that belie concepts of autonomous rural communities. This process of decentralization of natural resource management to democratically elected local councils is further complicated by the proliferation of project-based programs that build their own forms of 'community participation' outside the context of administrative decentralization.

At the micro-level, groups willing to work within the strictures defined by the environmental coalition are empowered to manage natural resource usage within the area (Hajer 1995). These strictures usually take a negative form, imposing restrictions and prohibitions (Deme 1998). Since most local economic activities revolve around natural resource usage, this gives them considerable political power. Groups who oppose the dominant environmental narratives frequently have no platforms through which they can voice their aspirations and dissent. They often become the main targets in allocating blame for environmental degradation.

Under the guise of protecting the environment, community groups can exclude 'outsiders' with whom they have conflicts over resource usage. In both Cote d'lvoire and Ghana, for example, transhumant Fulani herdsmen have been forced out of their grazing lands. Their practice of burning grass during the early dry season to cause new shoots to come up, has been cast as a cause of environmental destruction. In Ghana, a national campaign known as Operation Cow Leg was initiated in the year 2000 to expel 'alien' Fulani herders, who were portrayed in the national press as a major threat to the environment.

In many places, community militias have taken up environmental policing functions. This is most evident in the campaigns that have been introduced throughout West Africa to ban bush burning. Bush burning is an integral part of rotational farming. It has advantages as an easy land-clearance method, a way of removing pests and weeds, and a way of improving soil structure and pH. It can also prevent fuels building up that may conflagrate in worse wildfires at the height of the dry season. While fire ecology is now well understood, fire does not fit neatly into present global strategies of minimizing carbon emissions, and hence it has become a marginalized science in today's environmental coalitions (Pyne 1997). In many West African nations, chiefs have been empowered to introduce local by-laws banning the use of fire and to impose fines and other punitive measures on violators (Amanor 2001a). Fire-fighting community organizations have been created to regulate use of fire by farmers. In Ghana, for example, the Fire Volunteer Mobisquads are trained by the Fire Services to monitor bush burning. A major part of their training involves the practice of military drills. Farmers cannot clear their farms without the supervision of a Fire Volunteer, and this involves payment of a supervision fee that is considered extortionary by many farmers (Amanor 2001a). The framework presumes that farmers have no experience or knowledge of fire management. At the same time, it assumes that through a training program by the Fire Services (who have no formal knowledge or experience of farm-clearance management),

lasting at most three weeks, the Fire Volunteers have become experts on fire management. Thus the considerable knowledge that resides in rural communities has been swept aside in favor of restrictive legislation.

Contemporary environmental policies in West Africa are increasingly becoming decentralized. But they are not more democratic. Community organizations are being empowered to carry out surveillance activities of the local population so that global and national environmental policies can be effectively implemented and local people comply with global normative standards. Environmental management is by edict. Despite the rhetoric of democratic decentralization, platforms are not being established that enable rural people to come together to discuss their visions of appropriate environmental programs; their interests and demands on rights and access to forest resources; their perspectives on appropriate institutions and systems for natural resource management; and their visions of a development process that is equitable and sustainable. Rural people are not being provided with information that will enable them to make their own democratic decisions on managing natural resources. On the contrary, environmental policies developed in global centers of environmental expertise are being thrust upon rural people without the existence of appropriate information systems that would support the assertions on which these policies are based. Rural people are essentially being provided with commands and a set of simple messages based on inappropriate moralistic codes that fail to reflect the complexity of the relations of production and exchange within different regional economies. These moralistic codes are rooted in the conceptions of community as mass mobilization for public works or 'development' from above that infused the colonial project (Cowan and Shenton 1996). Cline-Cole (1997) argues that while current approaches to forestry employ a discourse evocative of radical reformist intent and a hint of subversiveness, they end up protecting the hegemony of dominant forest discourses rooted in colonialism, because they fail to problematize notions of 'community' and 'participation'.

Recent literature on environmental conflict management has developed a critique of participation, and recognizes that current strategies for participatory forest management tend to promote competition between different groups within settlements for control over resources that they then use to exclude other competing groups of producers. This literature stresses the need to build multi-stakeholder platforms, which bring different groups of producers to discuss natural resource conflicts and negotiate solutions (Bernard and Armstrong 1998). This is particularly addressed in the literature on pastoralism, since this is one of the prime groups of producers who have most blatantly suffered from environmental scapegoating and the appropriation of common pool resources by sedentary communities (Hesse and Trench 2000). While this approach recognizes the heterogeneity of the rural people, it fails to address issues concerned with the appropriation of rural rights in resources by the state and industry, and the need to create political reforms that make better conditions for the democratization of rural life and downward accountability of rural representatives. These approaches still tend to rely on getting strong traditional leadership to represent the conflicting groups that are frequently selected by the natural resource administrators. The emphasis is on the ability of the leadership to hold their membership accountable, to prevent them from engaging in natural resource conflicts, and to hold them to supporting negotiated decisions at these multi-stakeholder platforms. The need to negotiate outcomes frequently encourages those facilitating this process to exclude certain parties or select others with the authority to enable others to abide by decisions of the process of

consultation. As Leeuwis writes: '[A] facilitator may at a certain point have to strategically select participants and exclude others, put pressures on certain stakeholders, and/or impose sanctions if actors do not follow the agreed rules of conduct, etc.'(2000, 950)

Similar issues are brought up by Banzhaf *et al*. (2000) in the context of the Burkina Sahel program in Burkina Faso, which initiated a consultative development platform to bring about consensus among competing groups within the project area. The project built its management structures through creating alliances with powerful group leaders who could bring the groups they represented to accept the consultation process:

> *Most of the important decisions [in the community consultative process] are taken by its leaders, who are generally well known and respected. The leader of the Tuareg has been particularly active in getting the consultative process off the ground, using his long standing position and experience to reconcile many of the different ethnic groups in the zone. Traditionally dominant over other groups, his power base has been reduced as many of the old hierarchies have been overturned and his influence over the committee is now more benign, being of a moral rather than an authoritarian nature.*(Banzhaf *et al.* 2000, 32)

The danger here is that the consensus-building process essentially functions to exclude conflicts between different groups on the ground so that natural resource programs can continue to function, rather than serving to facilitate the emergence of downward accountability and a more just process of environmental administration based on incorporation of rural producers into environmental planning. Just as agencies select the groups who represent the community by their project interests, here the project selects its multiple stakeholder representatives to minimize conflicts so that the project can continue to pursue predefined objectives. It continues to uphold participation on the basis of predefined representation, and this representation is that which can prevent conflicts from festering rather than addressing issues of justice and better environmental representation. Without addressing issues of local democratization of resource administration the hegemony of existing forest policy continues to prevail as the projects focus on the divisions between communities at the local level, rather than their lack of rights in natural resource policy, and by building patron-client networks through relationship with village power figures and institutions, frequently derived from the annals of colonial rural administration.

Building Forest Assets

Is there scope in West Africa for alternative strategies that would build forest assets in the hands of the poor, so as to increase their wealth, protect the environment, and go beyond the mere rhetoric of participation and equity? Four main avenues have been distinguished for building natural assets in the hands of low-income communities and individuals (Boyce 2001):

- *Investment:* the creation of new natural capital or the improvement of natural capital to which the poor already have access.
- *Appropriation:* the establishment of rights of the poor to open-access resources.
- *Internalization:* rewarding the poor for benefits they provide to others as environmental services.

- *Redistribution:* the transfer of natural capital from others to the poor.

Investment as a natural asset-building strategy would build upon the important roles that rural communities in West Africa historically have played in creating and augmenting stocks of forest assets, by channelling support to continue and strengthen these processes. While there is a growing body of scientific literature on the rationales that underlie the adaptive strategies of African farmers, this knowledge tends to be sidelined by mainstream environmental programs anxious to promote their own technologies branded in international research institutions. Peasant farming practices are appreciated only when they fit into the scientists' own conceptions of viable 'soil and water conservation', 'watershed management', 'reforestation', or 'agroforestry'.

Present development structures do little to create platforms where farmers can engage in dialogue on appropriate natural resource management strategies. Instead most participatory approaches solicit farmers' feedback in refining and further developing technologies emanating from international research centers. Farmers participate in the programs of development agencies, rather than development agencies participating in helping farmers to attain their own vision. The farmers' own natural resource strategies – including rotational bush fallowing, the use of fire as a tool in managing the agroecology, and the preservation of trees through cutting and coppicing rather than planting seeds and seedlings – are frequently dismissed. Successful investment strategies would require the creation of platforms that enable farmers to voice their needs and aspirations, and to participate in the debate about relevant development strategies.

Appropriation is already an element of contemporary frameworks for participatory forest management. The rationale is that promoting community 'ownership' of forests will lead to more efficient management. As discussed above, however, this approach has had two main shortcomings. First, there are problems in identifying the community. Community groups recognized by the state frequently are vehicles for local elites to take actions against the rest of rural society, further marginalizing the rural poor. Second, community participation fails to address the injustices in the framework of forest management that have developed from colonial times. In the name of participation, rural citizens are given responsibilities but not rights. The inequities introduced by concessions, licenses, and permits enable forest resources to be appropriated by business classes allied with political elites, and limit the ability of rural people to participate in the trade of forest commodities.

The existing framework for community management tends to exclude 'outsiders' in the name of preventing the 'tragedy of the commons'. In so doing, it ignores interactions that have conserved forest resources. Such appropriation by 'community' organizations is often inappropriate, since historically there have often been multiple rights in land, and migrations have contributed to the development of the agricultural economy. Rural populations are frequently heterogeneous and linked to larger rural economies rather than insular village settlements. Yet the discourse of community forest management, rooted in concepts of autonomous isolated communities, frequently leads to conflicts between various land users, particularly between agriculturalists and pastoralists. Pastoralists, whose economic activities often transcend national boundaries, are portrayed as degraders of the environment, despite growing evidence that their activities in some instances have contributed to reforestation of forest fringe lands and the colonization of grassland by woodlands.

The success of appropriation as a strategy for natural asset building would require more nuanced strategies that recognize multiple rights in land, the important roles that mobile communities can play in creating and sustaining natural assets and the importance of synergistic interactions among diverse resource-dependent communities. Such strategies would seek to preserve common-pool resources that promote the integration of diverse livelihoods, while preventing the appropriation of rights to these resources by logging companies and by the state in the service of the rich and powerful. Again, the basic precondition for this would be the creation of platforms that enable rural people to voice their aspirations and to make the state more accountable and transparent.

Internalization as a natural asset-building strategy is complicated by the heterogeneity of rural communities, multiple access to different natural resources, and the inequalities of wealth and power within rural communities. It may be difficult to determine exactly which group of people creates or sustains the values of forest resources, since they may be the outcome of the interactions of different groups. The commodification of environmental services could disrupt interactions among different producers, and lead to competition to capture the value of the environmental services, disrupting the very basis on which common property regimes have been built. Given the paucity of information on West African environments, internalization strategies may become ideological, as donors and policy makers promote internalization for environmental services that they value while devaluing other environmental services that may be important to rural people. A just system of internalization can emerge only where there are democratic platforms that enable people to discuss, validate, and dispute.

A further danger is that any compensation for environmental services may be captured at the local level by elite groups who dominate community organizations. Others may be excluded from gaining access to the value of the environmental services they create. Glaring contradictions will occur, for example, where farmers' rights to individual trees growing on their land are not recognized, and the benefits from internalization are instead distributed to chiefs or community groups that are recognized and defined by the state. A successful strategy of internalization would seem to be predicated on prior efforts to ensure the rural producers have clearly defined rights in natural assets.

Redistribution of rights to forest assets therefore needs to be a central element of any reform process that aims to place forest resources in the service of poverty reduction. The basis for such redistribution must be a recognition of the rights of rural producers to the forest resources their work creates and preserves. This includes not only the rights of farmers to trees on their land, but also recognition of the important roles that other natural resource users play in creating assets, and the benefits of synergistic interactions among various producers. Given the complexity of multiple forest resource usage in West Africa, it is doubtful whether any of the other strategies for natural asset building can work without a framework for the redistribution of rights. This again would require the creation of democratic platforms in which different interest groups articulate their perspectives, negotiate practical solutions to natural resource problems, discuss ways of harmonizing multiple uses and mediate conflicts, establish codes of conduct, and recognize each other's contributions to economic prosperity.

Conclusion

In the present political context in West Africa a number of unfavourable conditions exist for the development of forestry reforms that reflect the aspirations of rural users of natural resources. The unfavourable conditions include the dominance of crisis narratives in policy making frameworks that undermine the strategies of rural people and deny them a voice in policy fora; participatory programs that attempt to impose hegemonic discourse and practices on rural populations; the resistance of state bureaucracies to democratic reform; the sidetracking of democratization by technocentric concerns with minimising the costs of administration to the state and passing on the burden to local government and the people; and the lack of rights of local communities to forest resources that instead tend to be appropriated or controlled by the state in collusion with powerful vested interests. Favorable conditions for forest sector reform also exist, however, in the growing body of scientific knowledge about the importance that rural African producers have played in creating natural assets and the rationale for their adaptive strategies in erratic and changing environments; today's need for flexible and adaptive strategies in an era of rapid and uncertain environmental change; and the increasing movement towards democratization in the region, backed by popular sentiments.

The current processes of decentralization that are occurring in West Africa extend to natural resource management. However, decentralization constitutes an arena for struggle between two opposing forces:

- An authoritarian tradition, with roots in colonial administration that seeks to enlist the people to implement top-down policy prescriptions, contribute labor and funds for development projects, and create local organizations to carry out policing functions to enforce regulations.
- A popular tradition calling for accountability, transparency, and policies that favor the ordinary people rather than the elites. The resulting pressures for the transition to democracy influenced a number of populist regimes in the late 1970s and 1980s, and influenced the process of decentralization in several countries, including Ghana, Burkina Faso, and Mali.

The underlying framework for decentralization requires downward accountability, a two-way flow of information, and elected representatives before it can work, and these factors work towards the strengthening of democratic forces. In the forestry sector, however, present policies based on notions of devolution to customary and traditional authority structures tend to undermine democratic decentralization. The goals of efficiency and reduced transaction costs are driving the processes of forestry reform more than concerns about equity, rural rights to natural resources, or participation in policy decisions. Yet the situation where every sector's organization and development program establishes its own community organization is untenable and inefficient (particularly from the point of view of community members who must spend time attending numerous group meetings). In the long-term, the solution must be to establish democratic platforms at the lowest level of administration, where multiple groups of natural resource users can discuss policy and make their own recommendations.

A growing body of African scholarship is subjecting concepts of 'community', 'customary', and 'participation' to critical analysis. It calls for replacing the colonial conception of the rural people as subjects with the conception of rural people as citizens (Mamdani 1996). It questions notions of a

uniform tradition in rural areas that is best articulated by the chief, and calls instead for the recognition of the plurality of African societies and the need to allow marginalized groups to express themselves in political discourse. As the philosopher Paulin Hountonjii writes:

> *By calling attention to what may be considered as 'the African difference', social scientists have overlooked the internal pluralism that exists -- within African cultures. They have not focused on the inner tensions that make them living cultures, just as unbalanced, and therefore, just as dynamic and bound to change, as any other culture in the world.*(2001, 13)

Rather than introducing repressive and exclusive forest regulations in the name of community, participatory natural resource management should be about encouraging debates among groups with different and often conflicting perspectives on appropriate policies.

The current concerns about global warming and climate change have prompted research that is undermining much of the received wisdom on environmental management in West Africa. Studies of the long-term history of the West African environment reveal considerable fluctuations in climate and transformations of vegetation, challenging notions of human populations disrupting an ecological equilibrium. In such non-equilibrium environments, the best strategies open to rural producers may be adaptive ones that respond to changes in the environment. This requires a complete transformation in the ways in which policy is made. The one-way transmission of development messages from 'above' needs to be replaced by two-way information systems in which environmental transformations at the micro-level can be relayed to research and policy centers. This requires a rural population that is informed and confident in placing demands on development agencies, and lower-level administrative staff who are also confident to relay the perceptions and decisions of community-level platforms to higher-level policymakers. The current alienation of rural people from policy decisions and their lack of rights in natural resources can only hinder the development of flexible forest management.

At present, there is a dearth of NGOs advocating for the rights of the poor to environmental entitlements in West Africa. Most NGOs either advocate the exclusionary protection of nature from human intervention through regulations and reservation, or merely provide technical environmental services to communities such as tree nurseries and seedling distribution programs. NGOs could play an important role by lobbying for the rights of rural people to forest resources and access to policy, and by promoting environmental organizations within communities that are truly representative.

Given the substantial political and financial resources invested in global environmental administration and research, international donors have a direct influence on the ways in which forest administration will evolve in West Africa. They can continue to invest in research rooted in crisis narratives and to support hegemonic management by coalitions that attempt to enforce environmental regulation and coercion. Alternatively, they can choose to promote more flexible systems of environmental management informed by recent scientific findings, which would deepening the democratic representation of different rural groups.

Changes in forest management will ultimately depend upon shifting the power relations in society and creating more secure rights in resources for forest-zone dwellers. At present, rights in forest resources for rural people are undermined by policies that claim to protect the environment

from people. In reality, these policies protect large profits for the select. They have failed to conserve the environment, and have frustrated the attempts of rural people to develop viable livelihoods. An alternative approach is to conceptualize forest resources as assets, the value of which has been and can continue to be enhanced by rural people. This approach needs to go beyond investment, and beyond conceptions of internalizing benefits from the provision of environmental services to others. It needs to redistribute rights so as to create the structures necessary to encourage new forms of forest management and recognize the injustices that rural people have suffered from colonial and postcolonial frameworks of environmental protection and administration. A focus on redistribution, environmental justice, and rights issues can create the necessary critical policy research framework to support economic growth and a greater participation of people in formulating natural resource policy.

Endnotes

[1] Other studies have described similar interactions. See Letouzey (1978) for Cameroon, and Spichiger and Blanc-Pamard (1973), Blanc-Pamard and Peltre (1984), Gautier (1990), and Bassett and Zueli (2000) for Cote d'lvoire.

[2] In a visit to Kissidougou with Melissa Leach and James Fairhead in 1998, farmers also identified cattle as being an important agent in the process of forest colonization in grassland. Forest lianas began to regenerate pastures rich in manure and gradually formed clumps of woody vegetation from which forest islands began to spread.

[3] Attempts to plant iroko in forest reserves have largely failed, with saplings being vulnerable to gall infection, caused by the insect *Phytolyma lota.* Perhaps it is the ecology of shifting cultivation with its impacts on raising soil fertility and its use of burning that has encouraged the proliferation of iroko. While generally unsympathetic to the use of fire in farm clearance in the dry semi-deciduous forests of Ghana, Hawthorne and Abu-Juam (1995:65) admit that 'the past economic value of the forests has been largely due to the abundance of species such as *Milicia excelsa and Mansonia* which have no doubt flourished as a consequence of a history of disturbance.'

[4] The Cameroon Forest Law was enacted in 1994, but was unacceptable to the World Bank and revised version was introduced in 1995 and implemented five years later. A central provision is that 70 percent of logs must be used for domestic processing. However, with pressure from France, it also made provisions for companies to continue to export more than 30 percent of logs provided they paid a progressive surtax.

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